

Some South African species of *Anchon* (Hemiptera-Homoptera: Membracidae)

by

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The type of *Anchon nodicornis* (Germar) is discussed, redescribed and figured. A redescription and figures of *A. gunni* Funkhouser is presented, and the following new species are described and figured: *A. dukei*, *A. tribulis*, *A. rusticum*, *A. agnatum* and *A. cornulatum*.

The following descriptions and figures are based on material in the National Collection of Insects, Pretoria, where the types are deposited.

All measurements are in mm.

Anchon nodicornis (Germar), figs 1-7

Centrotus nodicornis Germar, 1835: 257.

Anchon nodicornis (Germar), Buckton, 1903: 215.

This species was described by Germar (1835) from a single specimen collected on the promontory of the Cape of Good Hope. The original description is inadequate, as is the subsequent description of Buckton (1903), and so little remains of the type, which is in the British Museum (Natural History), London, that it is worthless for purposes of identification. The species is here identified from Distant's figures, drawn by Mr. Horace Knight, which are accepted as illustrating the species accurately. The male of the species is redescribed below from a specimen collected at Stutterheim, C.P. It agrees closely with Knight's figures and is preserved in the National Collection of Insects.

MALE. Head about vertical; vertex about 1.7 times wider than long, black, subplanate, finely punctate with short adpressed pale golden hairs and an impunctate lunate spot located below upper margin above each ocellus, upper margin arcuate and sinuate, lower margins carinate and obliquely sinuately curving to frontoclypeus. Eyes subglobose, vitreously succineous, closer to eyes than to each other and situated about on the centro-ocular line. Frontoclypeus declivous, suboval, extending about half its length below lower margins of vertex, lobes entirely fused, shortly pilose, tip rounded; genae and postclypeus covered with white tomentum. Antennae with basal segments ochraceous, flagellum brown.

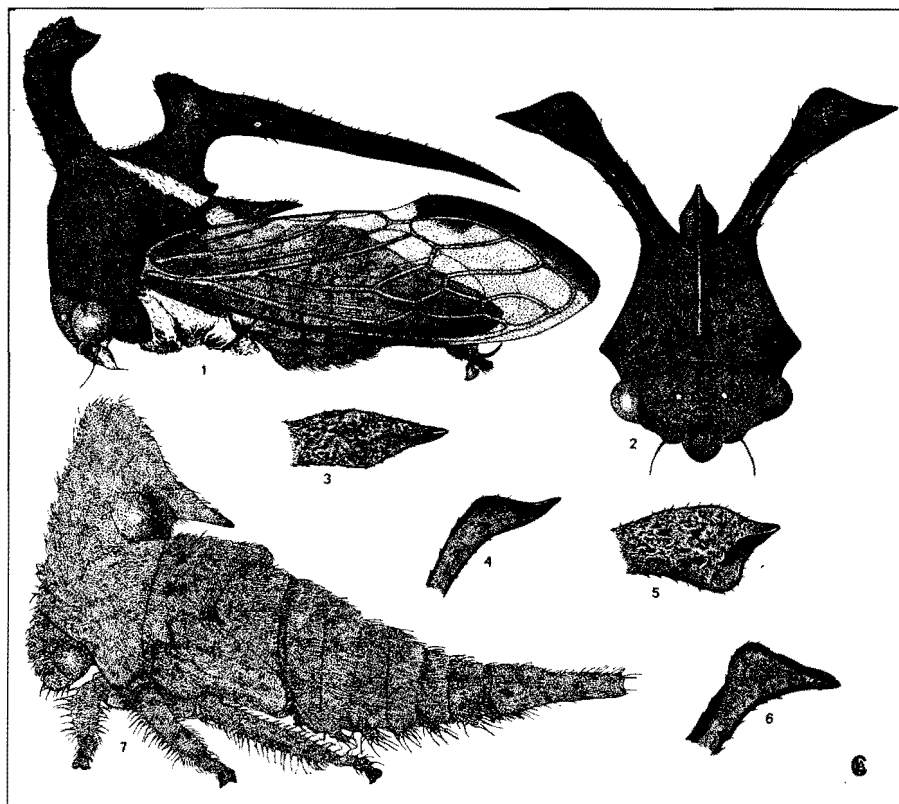
Pronotum black, finely punctate with short adpressed pale golden hairs; median carina percurrent; metopidium vertical, about twice as wide as high, supra-ocular callosities divided into small areas by pilose puncturation; humeral angles

prominent, posterior angles obtusely rounded, posterior margin transverse and a little arcuate over base of scutellum; a broad streak of white tomentum from base of lateral carina of horn to posterior angle. Suprahumeral horns emerging from disc, divaricate, rather slender, suboval in section at base, strongly tricarinate, very slightly forwardly inclined and apically curving slightly backwards; tips dorsally a little convex and granulate, only slightly laterally expanded and triangular in section, apices sharply acute, lateral and posterior surfaces slightly concave. Posterior process emerging behind disc and cephalad of posterior margin; base robust, suboval in section, a short rounded anterior projection at apex (elbow), turning caudad about at right angles high above scutellum, tricarinate and acuminate, straight or very weakly undulate, descending to impinge on or closely approach anal angles of tegmina and extending slightly beyond extremity of abdomen; tectiform above lateral carina and without distinct longitudinal depression, ventrally at basal third very weakly V-shaped becoming planate for apical two thirds, tip sharp. Scutellum triangular, slightly wider than long, black, finely punctate with short recumbent whitish hairs and dense white tomentum at basal angles, tip with a deep U-shaped emargination, sometimes a little upturned, apices bluntly acute. Tegmina three times as long as wide, very pale amber-tinted hyaline; basally narrowly black shading to brown, coriaceous and punctate with short adpressed hairs; veins pale brown with subcosta and pterostigma darker; apical limbus from anal angle to tip dark brown to blackish, tip acutely rounded. Sides of thorax black and more or less densely covered with white tomentum. Legs basally black, tibiae brown and tarsi slightly paler. Abdomen brown with strong black puncturation on tergites, sternites with short whitish to pale golden pilosity. Terminalia black, parameres halberd-shaped, brown, aedeagus U-shaped, brown, tip of ventral plate slightly expanded and rounded.

FEMALE. Similar to male but tips of horns strongly expanded on posterior margin.

NYMPH, last instar. Unfortunately, no nymph is available from Stutterheim. The specimen figured and described is from Umkomaas, Natal. In life pale green. Covered with recumbent to adpressed hairs. Head vertical and frontally curved, about 2,6 times wider than long, upper margin strongly arcuate, lower margins horizontal and produced below eyes almost to their extremities. Eyes subglobose with sparse erect hairs, ocelli almost obsolete, represented by small black depressions about equidistant from each other and from eyes and situated about on the centro-ocular line. Frontoclypeus horizontal with only its base visible from frontal aspect. Antennae ochraceous and well developed.

Pronotum slightly higher than wide from frontal aspect, rising vertically from frontal margin and curving into a broadly rounded somewhat laterally compressed crest, then descending and produced in a simple acute posterior process which extends over basal two thirds of mesanotum. Suprahumeral buds prominently subhemispherical with their posterior margins acutely produced; median carina percurrent and broad on metopidium, supra-ocular callosities depressed; humeral angles obsolete, lateral margin produced downwards and inserted between first two pairs of legs. Mesanotum medially broadly posteriorly produced over basal half of metanotum. Tegminal wing pads well developed with base of subcosta a little expanded between second and third pairs of legs. Wing pads of metanotum scarcely visible. Abdomen with seven visible segments and anal tube almost as long as tegminal wing pad, with moderately developed lateral lamellae fringed with small tubercles bearing long hairs, lamellae on second and



Figs. 1-7. *Anchon nodicornis* (Germar). 1. ♂, lateral aspect. 2. ♂ frontal aspect. 3. ♂ tip of right horn, dorsal aspect. 4. ♂ tip of right horn posterior aspect. 5. ♀ tip of right horn, dorsal aspect. 6. ♀ tip of right horn, posterior aspect. 7. nymph, last instar, lateral aspect.

seventh segments smaller than others, anal tube basally swollen with a dorsolateral depression on each side.

Host plant *Rubus* sp.

MEASUREMENTS. Lateral: frontal margin to tips of tegmina ♂ 6,28-6,93 (av. 6,62), ♀ 7,06-7,72 (7,39), to tip of posterior process ♂ 5,61-6,35 (5,63), ♀ 6,73-6,93 (6,81); frontal: expanse of horns ♂ 4,09-5,28 (4,80), ♀ 4,88-5,95 (5,36), length of horns ♂ 2,31-2,90 (2,54), ♀ 2,38-3,17 (2,82); width at humeral angles ♂ 2,51-2,84 (2,63), ♀ 2,71-3,04 (2,90); at eyes ♂ 1,38-1,65 (1,47), ♀ 1,58-1,85 (1,69). The females from Natal are slightly larger than those from the Cape.

MATERIAL EXAMINED. 18 ♂, 14 ♀ and one nymph as follows: Cape Prov. 3 ♂ 2 ♀, Stutterheim, Kologha Forest, Feb. 1964, E. McC. Callan; 3 ♂, 3 ♀, Alice, Hogsback, Feb. 1942, E. McC. Callan; 4 ♂, King William's Town, Hogs Back, Jan.

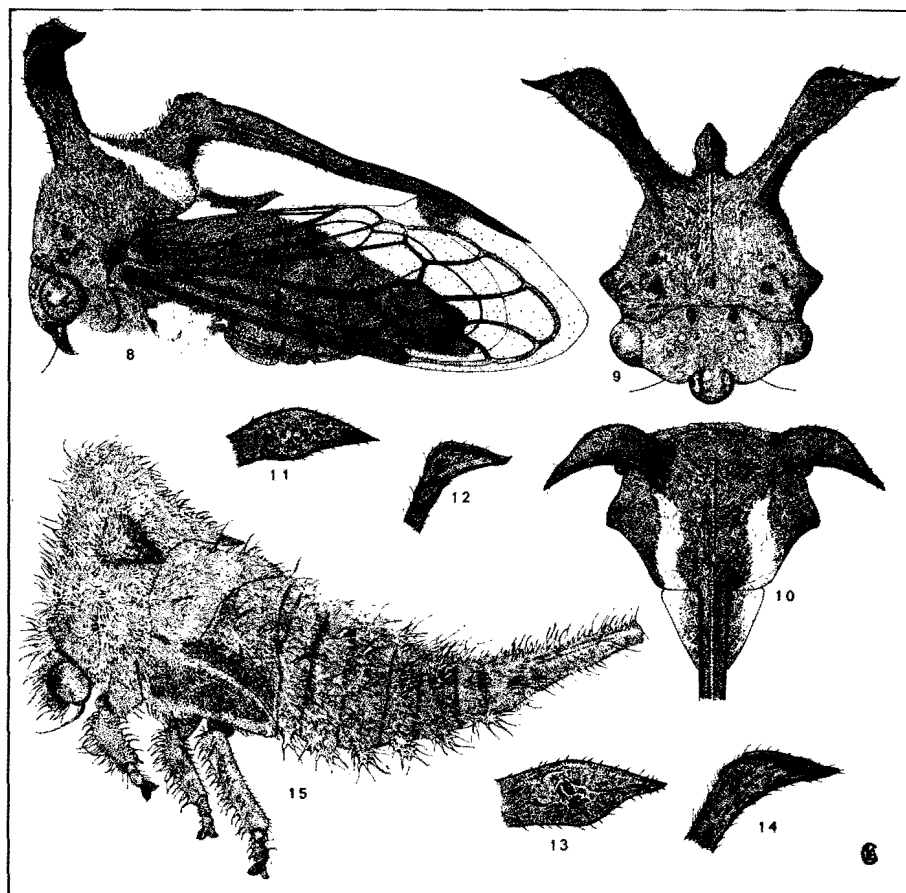
1956, A. H. Newton; 1 ♂, Eliotdale, June 1910, C. K. Brain; 2 ♂, Grahamstown, May 1956, E. McC. Callan; Natal: 1 ♂, 7 ♀ and 1 nymph, Umkomaas, Natal, March 1951, A. L. Capener; 1 ♂, Royal National Park, Natal, Feb. 1970, J. G. H. Londt; 1 ♀, Richmond, Natal, Feb. 1954, J. W. Hunt; 1 ♂, 1 ♀, Qudeni, Zululand, Feb. 1953, A. H. Newton; 1 ♂, Field's Hill, Natal, 1 April 1927, L. Bevis; 1 ♂, Little Switzerland, Natal, 31 Jan. 1959, H. D. Brown.

***Anchon dukei* spec. nov., figs. 8–15**

This species is very close to *A. nodicornis* (Germ.), but differs in the slightly shorter suprahumeral horns with narrower tips in both sexes, the angle of the posterior process not anteriorly produced, the apical limbus of the tegmina clear hyaline, except for a dark spot at anal angle, and the longer pilosity. The last instar nymph is also different from *nodicornis*.

MALE. Head vertical, vertex 1.6 times wider than long, subplanate, black, finely punctate with rather long dense adpressed pale golden hairs. A lunate impunctate spot is located below upper margin above each ocellus, upper margin arcuate and sinuate, lower margins weakly sinuately sloping and curved to frontoclypeus. Eyes subglobose, sordid succineous and mottled with brownish; ocelli vitreously succineous, closer to eyes than to each other and situated above the centro-ocular line. Frontoclypeus declivous, slightly longer than wide, extending below lower margins of vertex about two thirds its length, tip broadly rounded, lobes entirely fused, their margins parallel; genae without white tomentum, antennae with basal segments sordid ochraceous, flagellum brown.

Pronotum black, finely punctate with adpressed, recumbent and suberect pale golden hairs, median carina percurrent; metopidium vertical, twice as wide as high, supra-ocular callosities divided into small areas by adpressed hairs; humeral angles prominent and blunt, posterior angles obtusely rounded, posterior margin transverse and arcuate over base of scutellum; a broad dense stripe of white tomentum from base of lateral carina of horn to posterior angle. Suprahumeral horns arising from disc, divergent and a little frontally inclined, truncate oval in basal section, tricarinate, apically a little thickened and curving outwards with tips backwardly turned, dorsally only slightly apically expanded and a little convex, strongly acute to sharp tip, sometimes with a short incipient medio-dorsal carina. Posterior process emerging robustly behind disc and cephalad of posterior margin, elbowed about at right angles high above scutellum, without anterior projection, almost straight, gradually acuminate and gently descending to impinge on anal angles of tegmina and extending beyond extremity of abdomen, tip sharp tricarinate and steeply tectiform above lateral carinae, ventrally basally weakly "V"-shaped becoming planate on apical half with a very weak medial ridge which becomes obsolete near tip. Scutellum triangular, basally a little wider than long, black, finely punctate with rather long curved pale golden hairs and dense white tomentose hairs at basal angles. Tegmina 2.7 times longer than wide, very pale amber-tinted hyaline, basal seventh black coriaceous with pale golden hairs, pterostigma and veins dark brown, paler on apical margin, major veins margined with short pale golden hairs, pterostigma about four times longer than wide, a brown macula at anal angle, limbus clear hyaline, apically somewhat broadly acutely rounded. Sides of thorax black, meso and metapleura covered with dense white tomentum. Legs basally black, tibiae and tarsi brown, coxae with white tomentum. Abdomen black, sternites with very short hairs.



Figs. 8-15. *Anchon dukei* spec. nov. 8. ♂ lateral aspect. 9. ♂ frontal aspect. 10. ♂ dorsal aspect. 11. ♂ tip of right horn, antero-dorsal aspect. 12. ♂ tip of right horn, posterior aspect. 13. ♀ tip of right horn, antero-dorsal aspect. 14. ♀ tip of right horn, posterior aspect. 15. nymph, last instar, lateral aspect.

FEMALE. Similar to male.

NYMPH, last instar. Greenish in life. Differing from *nodicornis* in the dense covering of elongate tubercles from which arise long hairs which are mostly suberect, the slightly lower pronotal crest, the tegminal sheaths which are brown with broad creamy margins, and a row of branched tuberculate hairs on either side of the median line on the third to seventh abdominal tergites.

MEASUREMENTS. Lateral: frontal margin to tips of tegmina ♂ 5,95-6,41 (av. 6,22), ♀ 6,67-7,52 (6,94), to tip of posterior process ♂ 5,28-5,81 (5,53), ♀ 5,88-6,93

(6,27); frontal: expanse of horns ♂ 3,83–4,22 (3,95), ♀ 4,16–5,08 (4,62), length of horns ♂ 1,72–2,18 (2,07), ♀ 1,98–2,58 (2,18), width at humeral angles ♂ 2,38–2,58 (2,48), ♀ 2,58–2,97 (2,73), at eyes ♂ 2,08–2,38 (2,88), ♀ 2,44–2,68 (2,51).

Host plant *Rubus* sp. (Blackberry).

MATERIAL EXAMINED. 8 ♂, 6 ♀ and 1 nymph:

♂-holotype, 5 ♂- and 2 ♀-paratypes and 1 nymph from Jonkers Hoek, C.P., 3 Jan. 1948, A. J. Duke; 2 ♂- and 4 ♀-paratypes from near Paarl, C.P., Jan. 1961, J. H. Giliomee.

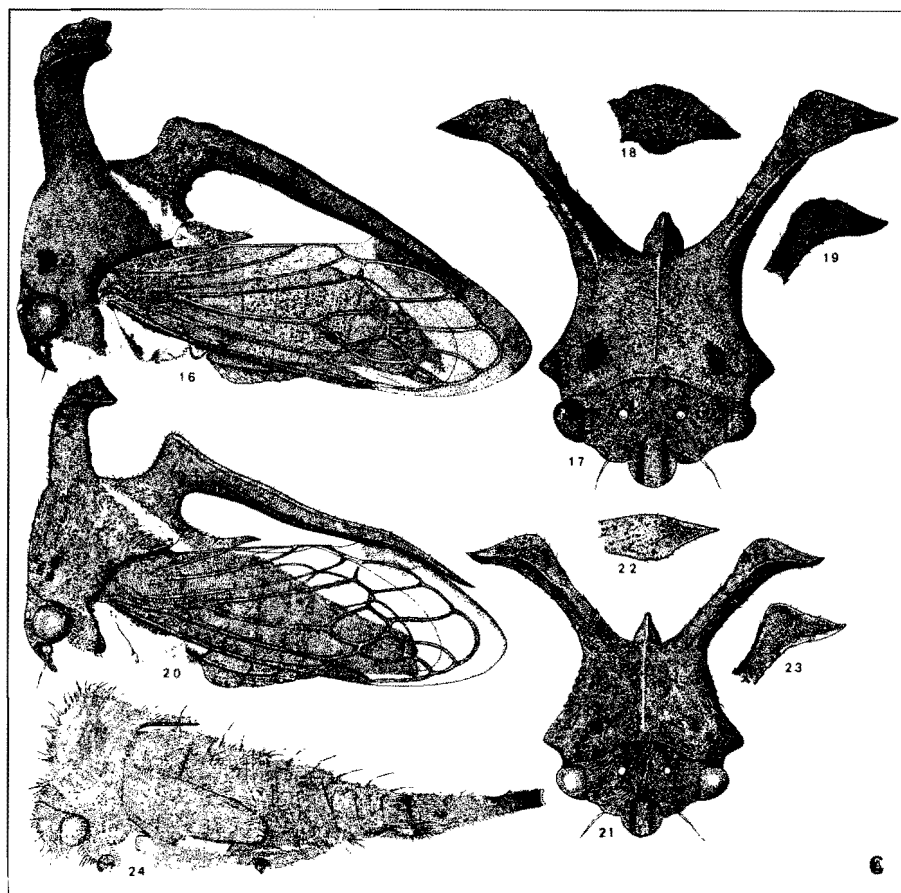
I have pleasure in dedicating this species to my friend Arthur Duke, by whom it was discovered.

Anchon gunni Funkhouser, figs 16–19

It is desirable to present a new description of this species as a number of characters were not mentioned in the original description (Funkhouser 1919). As then stated it is very close to *A. nodicornis*, from which it differs in the absence of an anterior projection at the angle of the posterior process and the darker colour of the tegmina. The new description is prepared from specimens believed to be conspecific and compared with the type from Pretoria by Miss L. M. Russell, United States National Museum, Washington.

MALE. Head vertical, vertex about 1,6 times wider than long, black, subplanate and very weakly moulded with a very shallow depression laterally of each ocellus, finely punctate with very short adpressed pale golden hairs; at upper margin above each ocellus is located an indistinct impunctate lunate spot; upper margin arcuate and sinuate, lower margins carinate, very weakly sinuate and rounded to frontoclypeus. Eyes subglobose, vitreously dull succineous; ocelli succineous, closer to eyes than to each other and situated above the centro-ocular line. Frontoclypeus a little declivous, suboval, about 1,2 times longer than wide, extending slightly more than half its length below lower margins of vertex, tip rounded, lobes entirely fused their sutures broadly impunctate. Antennae basally ochraceous, flagellum brown.

Pronotum black, finely punctate with very short adpressed pale golden hairs, median carina percurrent, metopidium vertical, twice as wide as high, supra-ocular callosities broken into three or four small impunctate areas; humeral angles prominent and blunt, posterior angles broadly rounded, posterior margin carinate, transverse, very weakly arcuate over base of scutellum; a broad wedge-shaped white tomentous streak from base of lateral carina of horns to posterior angle. Suprahumeral horns broad at base from lateral aspect, tricarinate, somewhat triangular in section with anterior carina forming apex, divergent; broadly foliate apically and curving a little backwards, dorsally convex and frontally inclined; ventrally concave between anterior and lateral and lateral and posterior carinae, tips slightly decurved and sharply acute, dorsally with a short incipient carina. Posterior process emerging behind disc and a little cephalad of posterior margin, suboval in section at base, turning backwards at right angles without anterior projection high above scutellum; almost straight, descending gently to impinge on anal angles and margins of tegmina and extending just beyond extremity of abdomen; base strongly punctate, beyond elbow tricarinate, tectiform above lateral carinae; ventrally basally "V"-shaped with a median keel becoming planate for apical



Figs. 16–24. *Anchon* species. 16–19. *A. gunni* Funkhouser. 16. ♂ lateral aspect. 17. ♂ frontal aspect. 18. ♂ tip of right horn, dorsal aspect. 19. ♂ tip of right horn, posterior aspect. 20–24. *A. tribulis* spec. nov. 20. ♂ lateral aspect. 21. ♂ frontal aspect. 22. ♂ tip of right horn, dorsal aspect. 23. ♂ tip of right horn posterior aspect. 24. nymph, last instar, lateral aspect.

half, acuminate to sharp tip. Scutellum triangular, a little wider at base than long, black with brown lateral margins, punctate with short suberect hairs, base narrowly convex, basal angles with dense white tomentum, tip deeply emarginate with a “U”-shaped excavation, apices acute. Tegmina 2.6 times longer than wide, amber hyaline, base dark brown, narrowly coriaceous and punctate; pterostigma and veins on basal half brown shading to pale amber at tips, veins margined with short suberect pale golden hairs, pterostigma about five times as long as wide, limbus moderately broad and brown from anal angle to tip, apically subacutely rounded. Sides of thorax black, densely covered with white tomentum, legs black with tarsi fulvous, claws brown. Abdomen

black with a greyish bloom and strong black puncturation above, sternites black with fulvous posterior margins and short silvery hairs.

Female. Similar to male.

No nymphs available.

Host plants *Clematis brachiata* Thunb. and *Clematopsis* sp. (Ranunculaceae).

MEASUREMENTS. Lateral: frontal margin to tips of tegmina ♂ 6,66–7,00 (av. 6,81), ♀ 7,46–8,11 (7,71), to tip of posterior process ♂ 5,48–6,28 (5,95), ♀ 6,48–7,66 (6,88); frontal: expanse of horns ♂ 4,69–5,95 (5,25), ♀ 5,88–6,80 (6,30), length of horns ♂ 2,31–2,84 (2,55), ♀ 2,24–3,30 (3,00), width at humeral angles ♂ 2,70–2,84 (2,79), ♀ 2,97–3,30 (3,16), at eyes ♂ 2,31–2,44 (2,40), ♀ 2,58–2,84 (2,70).

MATERIAL EXAMINED. 7 ♂ and 30 ♀ from Middelfontein, 10 m. North of Nylstroom (Tvl.), 15–20 Dec. 1953, D. W. Rorke and A. L. Capener. This species has also been taken at Pretoria, Irene, Vaalhoek and Elandshoek, Tvl.

Anchon tribulis spec. nov., figs 20–24

This species is very close to *A. gunni* Funkh. but is slightly smaller and differs in the slightly shorter horns with narrower tips, the more abruptly angulate elbow of the posterior process with a very short antero-vertical extension and the margins of the limbus only slightly suffused.

MALE. Head vertical, vertex about 1,6 times wider than long, black, sub-planate, finely punctate with adpressed pale golden hairs; upper margin arcuate and sinuate, impunctate spots located above each ocellus obscure, lower margins sinuate and curving to frontoclypeus. Eyes subglobose, sordid succineous mottled with brownish; ocelli succineous, about equidistant from each other and from eyes and situated slightly above the centro-ocular line. Frontoclypeus declivous, about as wide as long, tip rounded, lobes entirely fused with sutures broadly impunctate and lateral margins parallel. Basal segments of antennae ochraceous, flagellum brown, genae and post-clypeus densely covered with white tomentum.

Pronotum black, finely punctate with short adpressed whitish hairs, median carina percurrent; metopidium vertical, twice as wide at base as high; humeral angles prominent and blunt, posterior angles obtusely rounded, posterior margin very weakly rounded; a dense white tomentose streak from base of lateral carinae of horns to posterior angles. Suprahumeral horns arising from disc, divaricate, tricarinate, scarcely expanded apically, tips curving outwards and slightly backwards and sharply acute; dorsal surface convex and granulate, lateral and posterior surfaces about planate. Posterior process emerging robustly behind disc and cephalad of posterior margin, suboval in section, turned backwards at right angles with a very short antero-dorsal rounded projection, from elbow tricarinate and very gradually acuminate to sharply pointed tip which extends well beyond extremity of abdomen; dorsally above lateral carinae tectiform; ventrally about planate with a weak median ridge, impinging on anal angles and margins of tegmina. Scutellum triangular, wider at base than long, black, finely punctate with adpressed whitish hairs and a dense tuft of white tomentose hairs at basal angles,

apically with a broad "U"-shaped emargination, apices acute. Tegmina 2,6 times longer than wide, pale amber hyaline; base dark brown coriaceous and punctate with short adpressed hairs; pterostigma and veins brown becoming very pale apically, a brownish macula at anal angle, margin of limbus somewhat dusky, tips acutely rounded. Sides of thorax densely covered with white tomentum; legs basally black, tibiae, tarsi and claws brown. Abdomen black, tergites covered with greyish bloom and strongly sparsely punctate, sternites with dense white tomentose hairs.

FEMALE. Similar to male; claws dark brown.

NYMPH, last instar. Similar to *nodicornis* but with lower pronotum, supra-humeral buds poorly developed and without angle on posterior margin.

Host plant: *Rubus ludwigii* Ecklong & Zeyher (Blackberry).

MEASUREMENTS. Lateral: frontal margin to tips of tegmina ♂ 5,95–6,80 (av. 6,47), ♀ 6,93–7,72 (7,02), to tip of posterior process ♂ 4,95–5,95 (av. 5,53), ♀ 5,95–6,67 (6,35); frontal: expanse of horns ♂ 3,38–4,62 (4,11), ♀ 4,22–5,28 (4,79), width at humeral angles ♂ 2,24–2,71 (2,53), ♀ 2,77–3,10 (2,90), at eyes ♂ 2,10–2,31 (2,24), ♀ 2,38–2,70 (2,53).

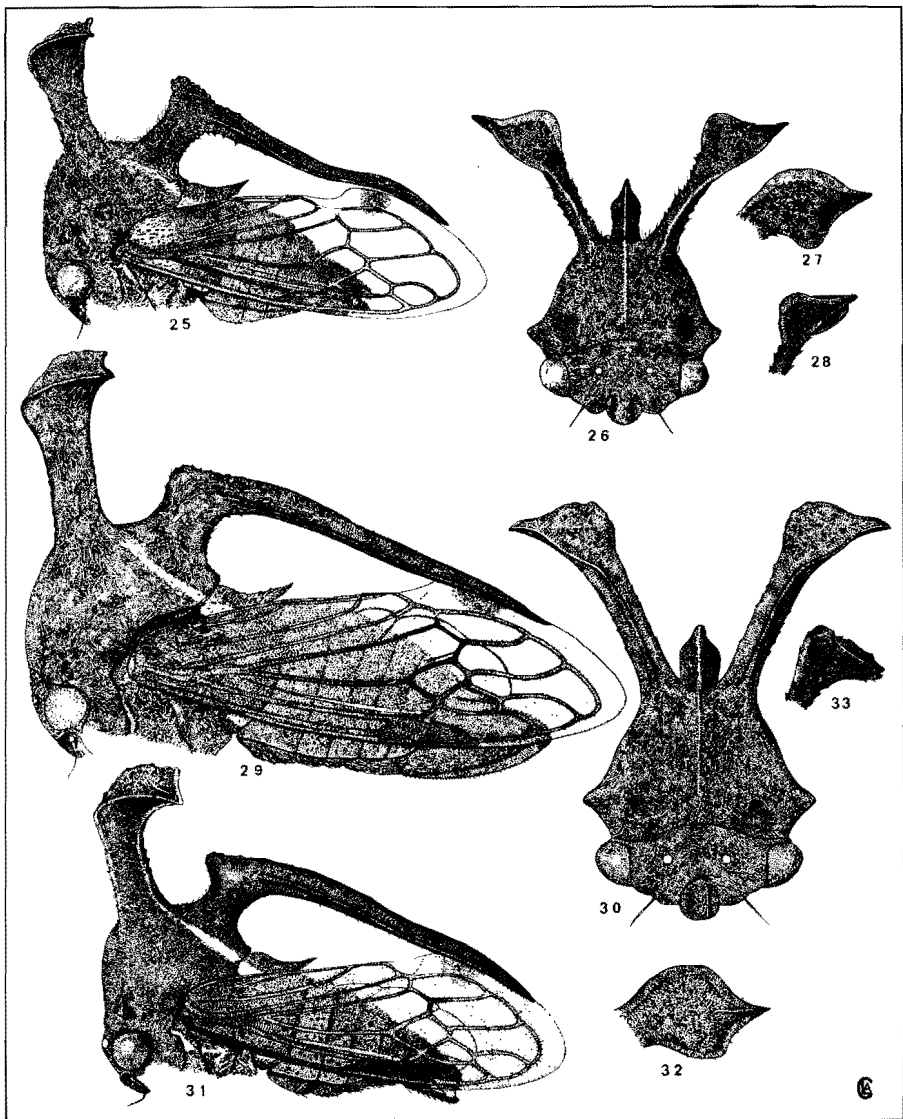
MATERIAL EXAMINED. ♂-Holotype, 9 ♂- and 9 ♀-paratypes and 2 nymphs from Golden Gate, O.F.S., Jan. 1964, A. L. Capener.

***Anchon rusticanum* spec. nov., figs 25–28**

A smaller species than *nodicornis* and differing in its brown colour, clear hyaline tegmina without dark apical limbus and more strongly dilated tips of horns in both sexes.

MALE. Head vertical; vertex 1,7 times wider than long, dark brown, sub-planate, finely punctate with adpressed pale golden hairs; an impunctate spot located at upper margin above each ocellus; upper margin arcuate and sinuate, lower margins weakly sinuately curving to frontoclypeus. Eyes subglobose, sordid succineous; ocelli vitreously succineous, closer to eyes than to each other and situated a little above the centro-ocular line. Frontoclypeus declivous, about as wide as long, extending about half its length below lower margins of vertex, tip broadly rounded, lobes entirely fused, their lateral margins parallel; antennae basally ochraceous, flagellum brown.

Pronotum dark brown, finely punctate with short adpressed tawny hairs, median carina percurrent; metopidium vertical, about twice as wide as high, supra-ocular callosities divided by puncturation and pilosity; humeral angles prominent and blunt, posterior angles obtusely rounded, posterior margin transverse and arcuate over base of scutellum; lateral carinae of horns obsoletely continued to posterior angles and giving rise to a streak of whitish hairs which are most dense at posterior angles. Supra-humeral horns emerging from disc, divaricate, tricarinate; from lateral aspect gradually broadening to preapical expansion, curving slightly outwards, the extreme tips slightly backwardly curving, preapically broadly expanded and sinuate to sharp tip; dorsal surface convex and granulate, lateral and posterior surfaces almost planate. Posterior process emerging behind disc and cephalad of posterior margin; moderately robust



Figs. 25-33. *Anchoa* species. 25-28. *A. rusticanum* spec. nov. 25. ♂ lateral aspect. 26. ♂ frontal aspect. 27. ♂ tip of right horn, antero-dorsal aspect. 28. ♂ tip of right horn, posterior aspect. 29-33. *A. agnatum* spec. nov. 29. ♀ lateral aspect. 30. ♀ frontal aspect. 31. ♂ lateral aspect. 32. ♀ tip of right horn, antero-dorsal aspect. 33. ♀ tip of right horn, posterior aspect.

and suboval in section at base, elbowed at right angles high above scutellum with a short anterior projection; gently descending and becoming slightly undulate where

it impinges on anal angles of tegmina and following its curve to a point well beyond extremity of abdomen; tapering slightly above scutellum then about uniform in girth to acuminate sharp tip; tricarinate, tectiform above lateral carinae, ventrally a little rounded at base and planate for apical two thirds without median ridge or keel. Scutellum triangular, wider at base than long, dark brown, finely punctate with pale tawny recumbent pilosity and dense white hairs at basal angles, tip upturned with a "U"-shaped emargination, apices sharply acute. Tegmina 2,6 times longer than wide, clear hyaline except for a small brownish macula on limbus at anal angle, basal sixth brown coriaceous and punctate with short adpressed hairs, pterostigma about four times longer than wide, brown, veins paler; apical limbus broad, tip subacutely rounded. Sides of thorax brown with adpressed pale golden and white tomentous hairs. Legs pale brown with coxae dark brown. Abdomen brown, tergites with a whitish bloom and strongly sparsely punctate, sternites with adpressed pale golden hairs.

FEMALE. Similar to male.

NYMPH similar to *nodicornis* but smaller.

MEASUREMENTS. Lateral: frontal margin to tips of tegmina ♂ 4,69–5,35 (av. 4,99), ♀ 5,28–5,68 (5,54), to tip of posterior process ♂ 4,22–4,69 (4,48), ♀ 4,82–5,15 (4,93); frontal: expanse of horns ♂ 3,30–3,83 (3,59), ♀ 3,83–4,36 (4,16), length of horns ♂ 1,72–2,10 (1,86), ♀ 1,92–2,24 (2,13), width at humeral angles ♂ 1,92–2,10 (2,03), ♀ 2,24–2,38 (2,32), at eyes ♂ 1,71–1,85 (1,79), ♀ 1,95–2,10 (2,02).

MATERIAL EXAMINED. ♂-Holotype, 8 ♂- and 4 ♀-paratypes from Umtentweni, Natal, July 1951–1962, and March 1961, A. L. Capener. Other specimens not included in the type series have been collected in Natal at Umkomaas and Durban, at Eshowe, Zululand, and in the Transvaal at Elandshoek and Tzaneen.

***Anchon agnatum* spec. nov., figs 29–33**

Very near *A. rusticanum* but a little larger and differing in the form of the posterior process which is very slightly arcuate.

FEMALE. Head vertical; vertex about twice as wide as long, brown, finely punctate with short adpressed golden hairs, weakly moulded, shallowly depressed laterally of ocelli; an impunctate spot located between upper margin and each ocellus; upper margin arcuate and sinuate, lower margins carinate, very weakly sinuate and curving to frontoclypeus. Eyes subglobose, succineous to brown; ocelli succineous, equidistant from each other and from eyes and about resting on the centro-ocular line. Frontoclypeus oval, slightly longer than wide, lobes entirely fused, sutures impunctate. Antennae basally ochraceous, flagellum brown.

Pronotum brown, finely punctate with adpressed golden pilosity, median carina percurrent; metopidium vertical, about twice as wide at base as high, supra-ocular callosities irregular, divided by puncturation and pilosity; humeral angles prominent and blunt, posterior angles obtusely rounded, posterior margin transverse and weakly arcuate over base of scutellum; a streak of dense white tomentum from base of lateral carinae of horns to posterior angles. Suprahumeral horns emerging from disc, about as long as width at humeral angles; divaricate with a very slight forward inclination;

tricarinate, triangular in section, very slightly expanding towards apical half as seen from lateral aspect; apically dorsally expanded and curving outwards and slightly backwards and obliquely frontally inclined; dorsal surface at tips strongly convex and a little granulate, with a short median carina at sharply pointed tip, lateral surface at tip slightly concave, posterior surface planate. Posterior process emerging behind disc and cephalad of posterior margin; robust and longitudinally oval in section at base; elbowed without appreciable anterior expansion and weakly arcuate high above scutellum and gently descending to impinge on anal angles of tegmina; strongly tricarinate and about uniform in girth to acuminate apical fourth, tip sharp and extending as far as extremity of abdomen; tectiform above lateral carinae; ventrally very shallowly "V"-shaped with a distinct median ridge, becoming planate for apical third. Scutellum wider at base than long, brown, finely punctate with adpressed golden hairs and a small tuft of tomentous white hairs at basal angles, slightly convex medially at base, tip a little upturned with a deep "U"-shaped emargination, apices acute. Tegmina 2,8 times longer than wide, very pale amber-tinted hyaline with a brownish macula on limbus at anal angle; basally brown coriaceous and punctate with very short adpressed hairs; pterostigma and veins brown, pterostigma about four times as long as wide, limbus broad, tip subacutely rounded. Sides of thorax brown with adpressed golden and white hairs, legs brown, claws dark brown to black.

MALE. Similar to female but dark brown and with a very short anterior projection at elbow, posterior process extending well beyond extremity of abdomen.

MEASUREMENTS. Lateral: frontal margin to tips of tegmina ♂ 5,28–5,54, ♀ 6,60–7,00 (av. 6,87), to tip of posterior process ♂ 4,88–5,08, ♀ 5,68–6,28 (5,99); frontal: expanse of horns ♂ 4,29–4,68, ♀ 4,42–5,41 (4,79), length of horns ♂ 2,24–2,58, ♀ 2,51–2,97 (2,72), width at humeral angles ♂ 2,10–2,24, ♀ 2,64–2,84 (2,72), at eyes ♂ 1,98, ♀ 2,38–2,44 (av. 2,39).

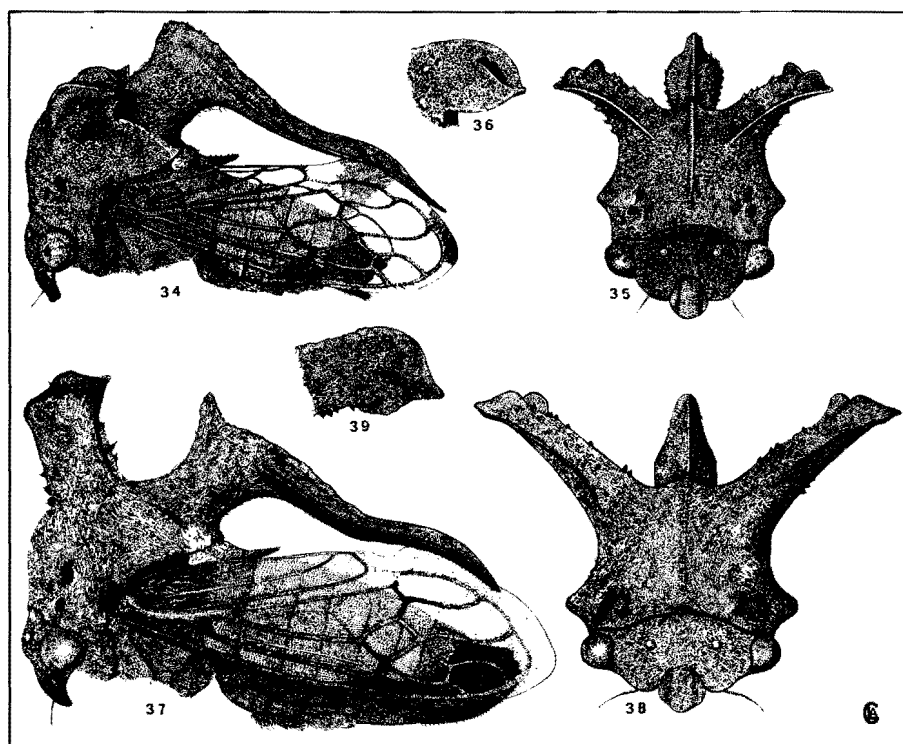
MATERIAL EXAMINED. ♀-Holotype, 2 ♀- and 14 ♂-paratypes from Umtentweni, Natal: 11 ♀ in July 1951, 1953, 1954 and 1955, 2 ♂, 1 ♀ March 1951, 1 ♀ Feb. 1953, A. L. Capener, and 1 ♀ from Highflats, Natal, Dec. 1951, M. S. Woodley.

Aberration. It is of interest to record an aberration of one of the females in this series. In this specimen the tip of the scutellum appears to be rounded without any excavation. Critical examination reveals that this impression is produced by the inward curvature of the apices which enclose a very minute emargination.

Anchon cornulatum spec. nov., figs 34–39

This species is provisionally placed in *Anchon* although it differs from all known species in the shorter and broader horns, and in the very robust heavy base of the posterior process, which is suggestive of certain species of *Tricoceph* Buckt. It appears to be another link in the chain of progressional development which is continually encountered in a study of the African Membracidae.

MALE. Head vertical; vertex dark brown, 1,75 times wider than long, weakly convex, finely punctate with reddish-brown micro hairs, lunate impunctate spots above ocelli almost obsolete; upper margin arcuate and sinuate, lower margins broadly rounded to frontoclypeus. Eyes subglobose, sordid succineous and mottled with reddish-



Figs. 34-39. *Anchon cornulatum* spec. nov. 34. ♂ lateral aspect. 35. ♂ frontal aspect. 36. ♂ tip of right horn, dorsal aspect. 37. ♀ lateral aspect. 38. ♀ frontal aspect. 39. ♀ tip of right horn, dorsal aspect.

brown; ocelli dull succineous, closer to eyes than to each other and situated well above the centro-ocular line. Frontoclypeus declivous, slightly longer than wide, suboval with tip broader than base and broadly rounded, lobes entirely fused. Antennae pale brownish.

Pronotum dark reddish-brown, finely punctate with very short adpressed reddish-gold hairs, median carina percurrent; metopidium vertical, about twice as wide at base as high and scarcely constricted below horns, supra-ocular callosities rather large and broken by puncturation and short hairs; humeral angles prominent and blunt, posterior margin sinuately rounded to humeral angles and weakly arcuate over base of scutellum; lateral carinae of horns continued to posterior angles and bearing whitish hairs, slightly convex laterally at base of posterior process. Suprahumeral horns emerging from disc, about 1.5 times longer than wide, directed outwards and upwards but not achieving the height of the posterior process, tricarinate, sparsely tuberculate, somewhat dorso-ventrally compressed, curving slightly backwards towards tips and a little apically decurved, anterior and posterior margins flattened, dorsal surface a little convex and weakly granulate with a short apical mediodorsal carina, tip acute. Posterior process emerging from disc and a little cephalad of posterior margin, very robust and laterally

strongly convex, rising high above horns and turning caudad in a rounded elbow high above scutellum; gently descending acuminate and sinuately to impinge on anal angles of tegmina, extending well beyond extremity of abdomen; middle third about uniform in girth and apical fourth strongly acuminate; strongly tricarinate with median carina strongly ridged; dorsally above lateral carinae tectiform; ventrally for basal third "V"-shaped then subplanate with a median ridge to tip, punctate with short curved hairs. Scutellum triangular, wider at base than long, dark brown, punctate with very short hairs and a tuft of white tomentous hairs at basal angles, base medially convex, tip with a "V"-shaped emargination, apices acute. Tegmina 2,7 times longer than wide, clear hyaline, very slightly amber-tinted apically with a brownish macula at anal angle; basal sixth brown coriaceous and punctate, pterostigma similar and about three times as long as wide; veins pale brownish and finely tuberculate, limbus moderately broad, tip subacutely rounded. Sides of thorax blackish with very short hairs and a sprinkling of white tomentum. Legs basally black, tibiae and claws reddish brown, tarsi paler. Abdomen black, tergites with a greyish bloom and puncturation black, sternites with very short pilosity.

FEMALE. Similar to male but horns longer and attaining height of posterior process, elbow of posterior process with an erect acute projection, and amber tinting of apical half of tegmina somewhat darker.

MEASUREMENTS. Lateral: frontal margin to tips of tegmina ♂ 4,62–5,08 (av. 4,89), ♀ 5,54–6,21 (5,76), to tip of posterior process ♂ 3,96–4,82 (4,44), ♀ 5,15–5,41 (5,19); frontal: expanse of horns ♂ 2,64–3,43 (3,07), ♀ 4,22–4,62 (4,55), length of horns ♂ 1,86–1,18 (2,08), ♀ 1,98–2,18, width at humeral angles ♂ 1,98–2,18, ♀ 2,38–2,64 (2,53), at eyes ♂ 1,85–1,92 (1,88), ♀ 2,05–2,31.

MATERIAL EXAMINED: 5 ♂♂ and 3 ♀♀: ♂-holotype and 1 ♂-paratype 2–8 Feb. 1962 and 1 ♂-paratype 1 Oct. 1965 from Umkomaas, Natal, A. L. Capener; 1 ♂-paratype Mposa, Zululand Oct. 1951, H. K. Munro; 1 ♂-paratype Mfongosi, Zululand (undated), W. E. Jongs; ♀-allotype Mtunzini, Zululand 7–14 Sept. 1949, A. L. Capener, and 2-paratypes, Shewasulu, near Tshakuma, N. Tvl., 18 Jan. 1965, M. Hoffman.

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